

**NISTIR 6191**

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# Demonstration Of Biodegradable, Environmentally Safe, Non-Toxic Fire Suppression Liquids

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**Daniel Madrzykowski  
David W. Stroup, Editors**

**July 1998**



**U.S. Department of Commerce  
Technology Administration  
National Institute of Standards and Technology  
Gaithersburg, MD 20899**



*Prepared for:*  
**Federal Emergency Management Agency  
U.S. Fire Administration  
Emmitsburg, MD 21727-8998**

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**William M. Daley, Secretary**  
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**Gary R. Bachula, Under Secretary for Technology**  
**National Institute of Standards and Technology**  
**Raymond G. Kammer, Director**



*Prepared for:*  
**Federal Emergency Management Agency**  
**James Lee Witt, Director**  
**U.S. Fire Administration**  
**Carrye B. Brown, Administrator**



## **APPENDIX B**

### **ALTERNATIVE FIRE EXTINGUISHING AGENTS**

Alternative Fire Extinguishing Agents Marketed in the United States as Being Suitable for Class A Fires,  
Class A and B Fires, and Class A, B. and D Fires

Report Prepared for the National Institute of Standards And Technology, Gaithersburg, Maryland, by the  
Alliance for Fire and Emergency Management, Ashland, Massachusetts, under Order Number  
43NANB609885

Principal Investigator: John Liebson  
Submitted: May 1996

## Methodology

The Principal Investigator used the following methods of finding as much information as possible about the extinguishing agents listed in this report:

1. Review of articles and advertisements in the fire service press.
2. Contacts with known manufacturers of subject agents.
3. Contacts with manufacturers of foam proportioning devices.
4. Internet search for product information, including World Wide Web, Gopher, and WAIS.
5. Search of relevant databases such as those at BFRL, Intermountain Fire Sciences Laboratory, U.S. Fire Academy.
6. Telephone conversations with knowledgeable people in this area of fire protection such as Paul Schlobohm (BLM-NIFC), Chief David Abernathy (Texas State Forest Service), Chuck George and Ceci Johnson (Intermountain Fire Sciences Laboratory-USFS.)
7. On-line requests for input through such sources as Safetynet on CompuServe, misc.emerg-services and bit.listserv.fire-1 on Usenet, electronic mailing list maintained by the National Association of Fire Equipment Dealers.
8. Thorough vetting of all exhibitors' booths at the 1996 Fire Department Instructors' Conference (FDIC).

The following list is of all identified "Alternative Fire Extinguishing Agents" that are marketed in the U.S. as being suitable for Class A Fires, Class A and B Fires, or Class A, B, and D Fires. Section I is alphabetical by manufacturer, giving name and address and name(s) of extinguishing agents; the number in square brackets [] after each agent name refers to the number of the tab (In the index which follows this text) under which the relevant literature is indexed. Section II of the list is of those extinguishing agents for which the Principal Investigator, having the name of an agent, was either unable to locate the relevant supplier or for which the supplier, having been contacted, failed to provide any information.

### I. Known Manufacturers

1. Angus Fire, Angier-Kennebec Road & Broad Street, Angler, North Carolina 27501. Forexpan 'S'. [1]
2. Ansul Incorporated, 1 Stanton Street, Marinette, Wisconsin 54143-2542. Silv-Ex Foam Concentrate. [2]
3. Baum's Castorine Co., Inc., 200 Matthew Street, Rome, New York. Pyrocool. [3]
4. Chemguard Inc., 204 South Sixth Avenue, Mansfield, Texas 76063. Class A Plus. [4]

5. Chemonics Industries, Inc., P.O. Box 21568, Phoenix, Arizona 85036. Fire-Trol Class A Foams Firefoam 103, 103B, 104. [5]
6. Delta-Omega Technologies, Ltd., P.O. Box 81518, Lafayette, Louisiana 70598-1518. Blackout Class A Foam and HazClean WA/TP. [6]
7. Denko, 414 West Sunrise Highway, Patchogue, New York 11772. Drench. [7]
8. Drexel Chemical Company, 1700 Channel Avenue, Memphis, Tennessee 38113-0327. Control-A. [8]
9. Eco-Foam, USA, Inc., 1120 Richmond Street, Reading, Pennsylvania 19604. Eco-Foam 2004. [9]
10. Environmental Products Inc., 393 Locust Street, Denver, Pennsylvania 17517. FireXPlus and Gem Enviro-Skin. [ 10]
11. Fine Water Products, 205 N. Cornell Avenue, Fullerton, California 92631. Fine Water DP30 and Fine Water HS 10.80. [11]
12. Firefreeze Worldwide, Inc., 270 Route 46, Rockaway, New Jersey 07866. ColdFlre. [12]
13. Fire Protection, Inc., 18425 S.E. Federal Highway, Jupiter, Florida 33469-1725. Barricade. [13]
14. Fuel Buster Laboratories, Inc., 261 Tiger Way #1, Peachtree City, Georgia 30269. Fuel Buster. There appears to be some question as to this product being listed for class A applications, as shown on appended literature. [14]
15. Macs Fire and Safety, Inc., 104 S. Jackson, Litchfield, Illinois 62056. Wetting Agent--Class A Concentrate. [15]
16. Monsanto Wildfire Center, 810 East Main Street, Ontario, California 91761. Phos-Chek WD-881.[16]
17. National Foam, 150 Gordon Drive, Exton, Pennsylvania 19341-1350. 1st Defense Class A Foam Concentrate. [17]
18. Neel Associates, Inc., P.O. Box 20126, Waco, Texas 76702-0126. Water Stretcher Class A Foam; product appears to be a commercial version of Fire Quench, a foam produced by the Texas Department of Corrections, P.O. Box 99-Industry, Huntsville, Texas 77342, and sold only to other government agencies. [18]
19. Nochar, Inc., 10333 N. Meridian Street, Suite 215, Indianapolis, Indiana 46290-1074. Nochar E112. [19]
20. Old Firehand Corporation, 21930 Third Place West, Bothell, Washington 98021. FlreBlok series. [20]

21. Pyrocap International Corporation, 15010-B Farm Creek Drive, Woodbridge, Virginia 22191. Pyrocap B-136. [21]
22. Stevens Co., P.O. Box 23312, Toledo, Ohio 43623. Fire Quencher and Penetro Wet. [22]
23. Sunrise Environmental Scientific, P.O. Box 10207, Reno, Nevada 89510. Water Plus. [23]
24. The Westford Chemical Corporation, P.O. Box 798, Westford, Massachusetts 01886-0798. BloSolve PinkWater. [24]
25. Winsol Laboratories, 1417 N.W. 51st Street, Seattle, Washington 98107-3188. Wetter Water, Water Extender. [25]

## II. Unidentifiable Products

26. Del Bueno Co., supposedly a California; could find no references to the company or to the product, Fire Foam.
27. Real Ideas, Inc., FireOut; this product has been marketed in the U.S., but no current references to either it or the company could be located.
28. BB. Schaeffer Manufacturing, 102 Barton, St. Louis, Missouri 63104. Fire Water 990; company was contacted, failed to provide any information.
29. Stockhouse Chemical, supposedly in North Carolina, Cease Fire: Unable to locate this company.